#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

### WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-004739

Address: 333 Burma Road **Date Inspected:** 23-Nov-2008

City: Oakland, CA 94607

**Project Name:** SAS Superstructure **OSM Arrival Time:** 1400 **OSM Departure Time:** 2300 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** Chao Chen Sun **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes N/A **Delayed / Cancelled:** No

**Bridge No:** 34-0006 **Component:** Tower diaphragms

### **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Steve Hall was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

OBG sub assembly bay 4

QA received Non Destructive Testing (NDT) notification document no. 001480 from ZPMC QC and performed 10% verification Magnetic particle Testing (MT) on the following weld joints: (Tower double diaphragm NSD1-23m)

NSD1-SA333B/B welds 1 thru 16. All welds tested appeared to be compliant with the contract documents. NSD1-SA261 welds 13 thru 18. All welds tested appeared to be compliant with the contract documents.

QA noted on the above mentioned tower diaphragm that holes were drilled through the inner flange and into the reinforcing fillet over the Partial Joint Penetration (PJP) weld joining the flange to the diaphragm. (See attached pictures) This condition exists in four locations on this diaphragm and four locations on tower diaphragm identified as WSD1-238 WSD1-23m. QA notified ZPMC QA Mr. Li Xiu Yang (Tom) of this condition. Mr. Yang said he would inform his leaders of this issue on Monday morning 11/24/08.

This QA has notified in writing and Via Email Caltrans task leader Mr. Robert Cuellar of this issue. Depending on Mr. Cuellars response an incident report may be forthcoming concerning this issue.

# WELDING INSPECTION REPORT

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## **Summary of Conversations:**

As mentioned above.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Ryan Smith, (858) 232-6799, who represents the Office of Structural Materials for your project.

# WELDING INSPECTION REPORT

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**Inspected By:** Hall,Steven Quality Assurance Inspector

**Reviewed By:** Cuellar,Robert QA Reviewer